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<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/890,943	URA, KIMASARU
	Examiner Michael Kornakov	Art Unit 1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 10/27/03.
2.  The allowed claim(s) is/are 15-17, 25 and 26.
3.  The drawings filed on 08/06/2001, corrected on 10/27/03 are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

5.  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a)  The translation of the foreign language provisional application has been received.
6.  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No. \_\_\_\_\_.
  - (b)  including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1 <input type="checkbox"/> Notice of References Cited (PTO-892)	5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____.
3 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. <u>11/10/03</u>	7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment
4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material	8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance
	9 <input type="checkbox"/> Other

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. G. Shekleton, esq. on 1/19/2004.

The application has been amended as follows:

Cancel Claims 1-14, 18-24;

Rewrite claim 15 as follows:

---A device for washing drain pipe in which a nozzle is secured at a leading end of a high pressure hose, a universal guide is linked to a leading end of the nozzle, a plurality of injection holes opened rearward in the nozzle, wherein:

    a certain injection hole of the plurality of injection holes is positioned in closest proximity to the inner peripheral surface of the pipe;

    a diameter of the certain injection hole is set so as to be larger than diameters of the other injection holes; and

    an angle  $\alpha$  subtended by center axis line I of the certain injection hole and center axis line H of the nozzle is set so as to be smaller than an angle  $\beta$  subtended by center axis line J of the other injection holes and the center axis line H of the nozzle, so that  $\alpha < \beta$ .---

Rewrite claim 16 as follows:

---A device for washing drain pipe in which a nozzle is secured at a leading end of a high pressure hose, a universal guide is linked to a leading end of the nozzle, a plurality of injection holes opened rearward in the nozzle, wherein:

a certain injection hole of the plurality of injection holes is positioned in closest proximity to the inner peripheral surface of the pipe;

a diameter of the certain injection hole is set so as to be larger than diameters of the other injection holes; and

an angle  $\alpha$  subtended by center axis line I of the certain injection hole and center axis line H of the nozzle and an angle  $\beta$  subtended by center axis line J of the other injection holes and the center axis line H of the nozzle respectively are set to 90 degrees.---

Rewrite claim 17 as follows:

---A device for washing drain pipe in which a nozzle is secured at a leading end of a high pressure hose, a universal guide is linked to a leading end of the nozzle, a plurality of injection holes opened rearward in the nozzle, wherein:

a certain injection hole of the plurality of injection holes is positioned in closest proximity to the inner peripheral surface of the pipe;

a diameter of the certain injection hole is made larger than diameters of other injection holes;

the certain injection hole is positioned farther rearward from the leading end of the nozzle than the other injection holes;

an angle  $\alpha$  subtended by center axis line I of the certain injection hole and center axis line H of the nozzle is an acute angle; and

an angle  $\beta$  subtended by center axis line J of the other injection holes and the center axis line H of the nozzle respectively are set to substantially 90 degrees.---

These amendments are made in order to remove unnecessary method limitations in apparatus claims and to better emphasize the structural limitations of apparatus, distinguishable from the prior art.

In claim 25 replace the clause "14 to 21, characterized in that" after the words "to any of claims" by the clause ---15 to 17, wherein---

In claim 26 replace the clause “14 to 21, characterized in that” after the words “to any of claims” by the clause ---15 to 17, wherein---

These amendments are made in order to establish proper dependency.

***Response to Applicant's Amendment***

2. All previous objection and rejections have been overcome by the amendment filed 10/27/2003, in combination with Examiner's amendment and the said objections and rejections are therefore withdrawn. The submission of corrected drawings 1-5 is noticed.

***Allowable Claims***

3. Claims 15-17, 25 and 26 are allowable over the prior art of record.

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance: the closest prior art of record is JP 7-55308.

JP'308 discloses device for cleaning inside surfaces of pipes, the said device comprising a high pressure hose and a nozzle, having a number of injection holes, oriented rearward relative to the moving direction of the nozzle, wherein the diameter of one hole is larger than the diameters of the other injection holes. The nozzle of JP'308 is **flexibly attached** to the leading end of the hose through the pressure bearing device, which causes rotation of the nozzle relative to the high pressure hose during the operation of disclosed device.

The teaching of JP'308 fails to anticipate or suggest fairly the cleaning device, wherein the nozzle is **secured** at the leading end of the high pressure hose utilizing a pressure connection socket. JP'308 also fails to disclose or suggest a nozzle, wherein the injection holes are positioned at certain angle with respect to each other and, specifically, the hole with larger diameter is positioned in such a way that its axis line is set at certain specified angles relative to the center axis line of the nozzle and to the center axis line of the other holes, as recited in the instant claims 15-17. These structural specificities cause the nozzle to move in a spiral manner in conjunction with the hose, which provides thorough cleaning of pipes with different configuration.

No other prior art that anticipates or suggests fairly the structural limitations as instantly recited in claims 15-17, 25 and 26, has been located as of the date of this office action. Therefore, claims 15-17, 25 and 26 are allowed over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272 1700.

*M. KORNAKOV*  
1/19/04

Michael Kornakov  
Examiner  
Art Unit 1746